

PAGE: 1

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/320,156ADATE: 09/01/1999
TIME: 16:40:42

Input Set: I320156A.RAW

This Raw Listing contains the General Information
Section and up to first 5 pages.

ENTERED

1 <110> APPLICANT: Rosenblum et al.
2 <120> TITLE OF INVENTION: Immunotoxins Directed Against c-erbB-2 (HER-2/Neu)
3 Related Surface Antigens
4 <130> FILE REFERENCE: D5425CIP2
5 <140> CURRENT APPLICATION NUMBER: US/09/320,156A
6 <141> CURRENT FILING DATE: 1999-05-26
7 <150> EARLIER APPLICATION NUMBER: 08/404,499
8 <151> EARLIER FILING DATE: 1995-03-17
9 <160> NUMBER OF SEQ ID NOS: 14
10 <210> SEQ ID NO 1
11 <211> LENGTH: 5
12 <212> TYPE: PRT
13 <213> ORGANISM: Artificial Sequence
14 <220> FEATURE:
15 <223> OTHER INFORMATION: synthetic linker sequence
16 <400> SEQUENCE: 1
17 Gly Gly Gly Gly Ser
18 5
19 <210> SEQ ID NO 2
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21 <212> TYPE: DNA
22 <213> ORGANISM: Artificial Sequence
23 <220> FEATURE:
24 <223> OTHER INFORMATION: Primer directed towards 5' upstream region of TAb 250
25 heavy chain
26 <400> SEQUENCE: 2
27 atatagcagg accatatg 18
28 <210> SEQ ID NO 3
29 <211> LENGTH: 15
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31 <213> ORGANISM: Artificial Sequence
32 <220> FEATURE:
33 <223> OTHER INFORMATION: Primer directed towards coding region of TAb 250 heavy
34 chain
35 <400> SEQUENCE: 3
36 atgaacttgg ggctc 15
37 <210> SEQ ID NO 4
38 <211> LENGTH: 15
39 <212> TYPE: DNA
40 <213> ORGANISM: Artificial Sequence
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42 <223> OTHER INFORMATION: Primer directed towards 5' upstream region of TAb 250
43 light chain
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45      tttacttcct tatatt                                15
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49 <213> ORGANISM: Artificial Sequence
50 <220> FEATURE:
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52 light chain
53 <400> SEQUENCE: 5
54      atgggcatca agatg                                15
55 <210> SEQ ID NO 6
56 <211> LENGTH: 33
57 <212> TYPE: DNA
58 <213> ORGANISM: Artificial Sequence
59 <220> FEATURE:
60 <223> OTHER INFORMATION: Primer directed towards sFv-23
61 <400> SEQUENCE: 6
62      gctgccaac cagccatggc gatgtctgac gtc            33
63 <210> SEQ ID NO 7
64 <211> LENGTH: 37
65 <212> TYPE: DNA
66 <213> ORGANISM: Artificial Sequence
67 <220> FEATURE:
68 <223> OTHER INFORMATION: Primer directed towards sFv-23
69 <400> SEQUENCE: 7
70      ccggagccac cgccaccgct agctgaggag actgtga        37
71 <210> SEQ ID NO 8
72 <211> LENGTH: 33
73 <212> TYPE: DNA
74 <213> ORGANISM: Artificial Sequence
75 <220> FEATURE:
76 <223> OTHER INFORMATION: Primer directed towards gelonin
77 <400> SEQUENCE: 8
78      ggtggcggtg gctccggtct agataccggtt agc            33
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80 <211> LENGTH: 52
81 <212> TYPE: DNA
82 <213> ORGANISM: Artificial Sequence
83 <220> FEATURE:
84 <223> OTHER INFORMATION: Primer directed towards gelonin
85 <400> SEQUENCE: 9
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88 <211> LENGTH: 1517
89 <212> TYPE: DNA
90 <213> ORGANISM: Artificial
91 <220> FEATURE:
92 <223> OTHER INFORMATION: nucleotide sequence encoding scFv23-gelonin
93 immunotoxin
94 <400> SEQUENCE: 10

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PAGE: 3

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/320,156A

DATE: 09/01/1999

TIME: 16:40:42

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95      cccatggcga tgtctgacgt ccagctgacc cagtctccag caatcctgtc tgcattctcca 60
96      ggggagaagg tcacaatgac ttgcagggcc accccaagtg taagttacat gcactgggat 120
97      cagcagaagc caggatcctc ccccaaacct tggatttata ccacatccaa cctggcttct 180
98      ggagtccctg ctgccttcag tggcgggtggg tctgggacct cttactctct cacagcagca 240
99      gagtggaggc tgaagatgct gccacttatt actgccagca gtggagtctg agcccaccca 300
100     cgttcggagg ggggtccaag ctggaaataa aaggttctac ctctggttct ggtaaattct 360
101     ctgaaggtaa aggtgtgcag ctgcaggagt caggacctga ggtggtgaag cctggagggt 420
102     caatgaagat atcctgcaag acttctgggt actcattcac tggccacacc atgaactggg 480
103     tgaagcagag ccatggaaag aaccttgagt ggattggact tattaatcct tacaatggtg 540
104     atactaacta caaccagaag ttcaagggca aggccacatt tactgtagac aagtcgtcca 600
105     gcacagccta catggagctc ctcagctctga catctgagga ctctgcagtc tattactgtg 660
106     caaggagggt tacggactgg tacttcgatg tctggggcgc agggaccacg gtcaccgtct 720
107     cctcagctag cgggtggcgt ggctccggtc tagataccgt tagcttcagc accaaaggcg 780
108     cgacctatat cacctacgtt aatttcctga acgaactgcy tgttaaactg aaaccggaag 840
109     gtaacagcca tggcatcccg ctgctgcgta aagggtgatga cccgggtaaa tgcttcgtgc 900
110     tgggtggcgt gagcaacgat aacggtcagc tggcagaaat cgcaatcgat gttaccagcg 960
111     tgtacgtagt tggctatcag gtgcgtaacc gcagctactt cttcaaagat gctccggatg 1020
112     cagcgtacga aggcctgttc aaaaacacca tcaaaaaccc gctgctgttc ggtggcaaaa 1080
113     ctgctctgca cttegggtggc agctatccga gcctggaagg cgaaaaagcg taccgcgaaa 1140
114     ctaccgatct gggatcga aacgctgcgca tcggcatcaa aaaactggac gaaaacgcga 1200
115     tcgacaacta caaacgcacc gaaatcgcg gctctctggt tgtgatccag atggtgagcg 1260
116     aagcggcacg ttccacctc atcgaaaacc agattcgtaa caacttcag cagcgtatcc 1320
117     gtccggcgaa caacaacatc tctctggaaa acaaatgggg caaactgagc ttccagatcc 1380
118     gtaccagcgg tgcgaacggt atgttcagcg aagcgggtga actggaacgc gcgaacggca 1440
119     aaaaatacta cgtgactgcy gtggatcagg tgaaccgaa aatcgactg ctgaaattcc 1500
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<210> SEQ ID NO 11

<211> LENGTH: 506

<212> TYPE: PRT

<213> ORGANISM: Artificial

<220> FEATURE:

<223> OTHER INFORMATION: Polypeptide encoded by the scFv23-gelonin immunotoxin

<400> SEQUENCE: 11

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129              5                      10                      15
130      Leu Ser Ala Ser Pro Gly Glu Lys Val Thr Met Thr Cys Arg Ala
131              20                      25                      30
132      Thr Pro Ser Val Ser Tyr Met His Trp Tyr Gln Gln Lys Pro Gly
133              35                      40                      45
134      Ser Ser Pro Lys Pro Trp Ile Tyr Thr Thr Ser Asn Leu Ala Ser
135              50                      55                      60
136      Gly Val Pro Ala Arg Phe Ser Gly Gly Gly Ser Gly Thr Ser Tyr
137              65                      70                      75
138      Ser Leu Thr Val Ser Arg Val Glu Ala Glu Asp Ala Ala Thr Tyr
139              80                      85                      90
140      Tyr Cys Gln Gln Trp Ser Arg Ser Pro Pro Thr Phe Gly Gly Gly
141              95                      100                     105
142      Ser Lys Leu Glu Ile Lys Gly Ser Thr Ser Gly Ser Gly Lys Ser
143              110                     115                     120
144      Ser Glu Gly Lys Gly Val Gln Leu Gln Glu Ser Gly Pro Glu Val

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PAGE: 4

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/320,156A

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TIME: 16:40:42

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145		125		130		135
146	Val Lys Pro Gly	Gly Ser Met Lys Ile	Ser Cys Lys Thr Ser	Gly		
147		140		145		150
148	Tyr Ser Phe Thr	Gly His Thr Met Asn	Trp Val Lys Gln Ser	His		
149		155		160		165
150	Gly Lys Asn Leu	Glu Trp Ile Gly Leu	Ile Asn Pro Tyr Asn	Gly		
151		170		175		180
152	Asp Thr Asn Tyr	Asn Gln Lys Phe Lys	Gly Lys Ala Thr Phe	Thr		
153		185		190		195
154	Val Asp Lys Ser	Ser Ser Thr Ala Tyr	Met Glu Leu Leu Ser	Leu		
155		200		205		210
156	Thr Ser Glu Asp	Ser Ala Val Tyr Tyr	Cys Ala Arg Arg Val	Thr		
157		215		220		225
158	Asp Trp Tyr Phe	Asp Val Trp Gly Ala	Gly Thr Thr Val Thr	Val		
159		230		235		240
160	Ser Ser Ala Ser	Gly Gly Gly Gly Ser	Gly Leu Asp Thr Val	Ser		
161		245		250		255
162	Phe Ser Thr Lys	Gly Ala Thr Tyr Ile	Thr Tyr Val Asn Phe	Leu		
163		260		265		270
164	Asn Glu Leu Arg	Val Lys Leu Lys Pro	Glu Gly Asn Ser His	Gly		
165		275		280		285
166	Ile Pro Leu Leu	Arg Lys Gly Asp Asp	Pro Gly Lys Cys Phe	Val		
167		290		295		300
168	Leu Val Ala Leu	Ser Asn Asp Asn Gly	Gln Leu Ala Glu Ile	Ala		
169		305		310		315
170	Ile Asp Val Thr	Ser Val Tyr Val Val	Gly Tyr Gln Val Arg	Asn		
171		320		325		330
172	Arg Ser Tyr Phe	Phe Lys Asp Ala Pro	Asp Ala Ala Tyr Glu	Gly		
173		335		340		345
174	Leu Phe Lys Asn	Thr Ile Lys Asn Pro	Leu Leu Phe Gly Gly	Lys		
175		350		355		360
176	Thr Arg Leu His	Phe Gly Gly Ser Tyr	Pro Ser Leu Glu Gly	Glu		
177		365		370		375
178	Lys Ala Tyr Arg	Glu Thr Thr Asp Leu	Gly Ile Glu Pro Leu	Arg		
179		380		385		390
180	Ile Gly Ile Lys	Lys Leu Asp Glu Asn	Ala Ile Asp Asn Tyr	Lys		
181		395		400		405
182	Pro Thr Glu Ile	Ala Ser Ser Leu Val	Val Ile Gln Met Val	Ser		
183		410		415		420
184	Glu Ala Ala Arg	Phe Thr Phe Ile Glu	Asn Gln Ile Arg Asn	Asn		
185		425		430		435
186	Phe Gln Gln Arg	Ile Arg Pro Ala Asn	Asn Asn Ile Ser Leu	Glu		
187		440		445		450
188	Asn Lys Trp Gly	Lys Leu Ser Phe Gln	Ile Arg Thr Ser Gly	Ala		
189		455		460		465
190	Asn Gly Met Phe	Ser Glu Ala Val Glu	Leu Glu Arg Ala Asn	Gly		
191		470		475		480
192	Lys Lys Tyr Tyr	Val Thr Ala Val Asp	Gln Val Lys Pro Lys	Ile		
193		485		490		495
194	Ala Leu Leu Lys	Phe Leu Glu Lys Asp	Glu Leu			

PAGE: 5

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/320,156A

DATE: 09/01/1999

TIME: 16:40:42

Input Set: I320156A.RAW

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198 <212> TYPE: DNA
199 <213> ORGANISM: Artificial
200 <220> FEATURE:
201 <223> OTHER INFORMATION: nucleotide sequence encoding scFv23-gelonin
202 immunotoxin
203 <400> SEQUENCE: 12
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205 gtcacaatga cttgcagggc caccccaagt gtaagttaca tgcactggta tcagcagaag 120
206 ccaggatcct cccccaacc ttggatttat accacatcca acctggcttc tggagtccct 180
207 gctcgcttca gtggcggtgg gtctgggacc tcttactctc tcacagtcag cagagtggag 240
208 gctgaagatg ctgccactta ttactgccag cagtggagtc gtagccacc caggttcgga 300
209 ggggggtcca agctggaaat aaaaggttct acctctggtt ctggtaaatac ttctgaaggt 360
210 aaaggtgtgc agctgcagga gtcaggacct gaggtgggtga agcctggagg ttcaatgaag 420
211 atatcctgca agacttctgg ttactcattc actggccaca ccatgaactg ggtgaagcag 480
212 agccatggaa agaacttga gtggattgga cttattaatc cttacaatgg tgatactaac 540
213 tacaaccaga agttcaaggg caaggccaca tttactgtag acaagtcgtc cagcacagcc 600
214 tacatggagc tcctcagtct gacatctgag gactctgcag tctattactg tgcaaggagg 660
215 gttacggact ggtacttcca tgtctggggc gcagggacca cggtcaccgt ctctcagct 720
216 agcgggtggc gtggctccgg tctagacacc gtgagcttta gcactaaagg tgccacttat 780
217 attacctacg tgaatttctt gaatgagcta cgagttaaata tgaaaccgga aggtaacagc 840
218 catggaatcc cattgctgcg caaaaaatgt gatgatcctg gaaagtgttt cgttttggtta 900
219 gcgctttcaa atgacaatgg acagttggcg gaaatagcta tagatgttac aagtgtttat 960
220 gtgggtgggct atcaagtaag aaacagatct tacttcttta aagatgctcc agatgctgct 1020
221 tacgaaggcc tcttcaaaaa cacaattaaa acaagacttc attttggcgg cagctatccc 1080
222 tcgctggaag gtgagaaggc atatagagag acaacagact tgggcattga accattaagg 1140
223 attggcatca agaaacttga tgaaaatgcg atagacaatt ataaaccaac ggagatagct 1200
224 agttctctat tggttgttat tcaaattggtg tctgaagcag ctcgattcac ctttattgag 1260
225 aaccaaatta gaaataactt tcaacagaga attcgcccg cgaataatac aatcagcctt 1320
226 gagaataaat ggggtaaact ctcgttccag atccggacat caggtgcaaa tggaatgttt 1380
227 tcggaggcag ttgaattgga acgtgcaaat ggcaaaaaat actatgtcac cgcagttgat 1440
228 caagtaaaac ccaaaatagc actcttgaag ttcgtcgata aagatcctaa agcttaatga 1500
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230 <211> LENGTH: 498
231 <212> TYPE: PRT
232 <213> ORGANISM: Artificial
233 <220> FEATURE:
234 <223> OTHER INFORMATION: Polypeptide encoded by the scFv23-gelonin immunotoxin
235 <400> SEQUENCE: 13
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237 5 10 15
238 Ser Pro Gly Glu Lys Val Thr Met Thr Cys Arg Ala Thr Pro Ser
239 20 25 30
240 Val Ser Tyr Met His Trp Tyr Gln Gln Lys Pro Gly Ser Ser Pro
241 35 40 45
242 Lys Pro Trp Ile Tyr Thr Thr Ser Asn Leu Ala Ser Gly Val Pro
243 50 55 60
244 Ala Arg Phe Ser Gly Gly Gly Ser Gly Thr Ser Tyr Ser Leu Thr

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PAGE: 6

VERIFICATION SUMMARY
PATENT APPLICATION US/09/320,156A

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Line ? Error/Warning

Original Text
